

GRADOMSKI, Bohdan

The behavior of the leukocytic index of inflammation in the course of trichinosis. Wiad. parazyt. 10 no.4:330-331 '64

1. Klinika Chorob Zakaźnych Akademii Medycznej, Białystok.

GRADOWSKI, T.

"Is It Only a Question of Quantity in the Sea Fisheries?" p. 4, (GOSPODARKA RYBNA, Vol. 5, no. 1, Jan. 1953, Warsaw, Poland).

SO: Monthly List of East European Accessions, Lib of Congress, Vol 2, no 19 Oct 1953, Uncl.

GRADOWSKI, T.

"Role and Place of the Fish Industry in the Realization of Recommendations of the 9th Party Conference." p. 4, (GOSPODARKA RYBNA, Vol. 6, No. 1, Jan. 1954. Warszawa, Poland.)

SO: Monthly List of East European Accession, (EEAL), LC, Vol. 3, No. 12, Dec. 1954, Uncl.

32836

S/020/62/142/002/017/029

B104/B138

24.6800

AUTHORS: Chupakhin, M. S., and Gradshtayn, E. (Orsay)

TITLE: Effect of oriented ion formation in a three-filament ion source of a mass spectrometer

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 142, no. 2, 1962, 337-339

TEXT: The authors improved the accuracy of mass-spectrometric determinations by using a three-filament ion source (Fig. 1) in which it was possible to heat all three filaments (Fig. 2). Each of these could be used as the vaporizer while the other two acted as ionizers. The ion source had a slit of 0.1 mm. An MB2302 (MV2302) mass spectrometer was used as analyzer. A definite amount of sulfide, carbonate, or similar compound of the element to be investigated was applied to the vaporizer. The chemical compound used was not found to affect the ion yield. In the course of the experiment the ion current was determined after applying the samples to filaments (1) or (2). Evaporation took place without ionization, and ions were produced by the filaments acting as ionizers. After 15 different elements had been examined three different groups of elements could be

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Effect of oriented ion formation ...

established: (1) the ion current of elements with two electrons in the outer orbit (Ba, Sr, V, Mg, Co, Fe, Mn) is many times greater if the samples are applied to filaments (2) or (3). (2) The ion current of elements with one or three electrons in the outer orbit (Li, Al, Cr, Re, In) is larger with samples evaporated from filament (1). As for Pb, it did not matter from which filament the sample was evaporated. Nd formed NdO^+ ions only. The oxidation of ionizers increased the determination accuracy for some elements. Academician A. P. Vinogradov and Professors Zh. Teyak and R. G. Bernas (Orsay, France) are thanked for their cooperation. There are 2 figures, 1 table, and 4 non-Soviet references: The three references to English-language publications read as follows: W. G. Inghram, W. A. Chupka, Rev. of Sci. Inst., 24, 516 (1953); B. M. Gardon, L. Friedman, Phys. Rev., 108, 1053 (1957). E. Gradsstain, J. Phys. Rad., 21, 54 (1960).

ASSOCIATION:

Institut geokhimii i analiticheskoy khimii im. V. I. Vernadskogo AN SSSR (Institute of Geochemistry and Analytical Chemistry imeni V. I. Vernadskiy, AS USSR)
(M. S. Chupakhin)

Card 2/A
3

32836

Effect of oriented ion formation ...

S/020/62/142/002/017/029
B104/B138

PRESENTED: June 20, 1961, by A. P. Vinogradov, Academician

SUBMITTED: June 15, 1961

Fig. 1. Diagram of three-filament ion source.

Legend: (1), (2), and (3) are the filaments; (4) drawing out plate;
(5) focusing plate; (6) beam centering plate; (7) accelerating lens.

Fig. 2. Position of filaments in the ion source. (1), (2), and (3)
filaments, + 2500 v; (4) shield, + 2500 v; (5) drawing out plate, + 2200 v. ✓

Card 3/4/3

MARGULOVA, T.Kh., doktor tekhn.nauk; GRADSKAYA, L.V., inzh.; KERMAN, E.Ya., inzh.

Intake of cooling water in condensers. Elek.sta. 32 no.4:36-40
Ap '61. (MIRA 14:7)
(Condensers (Steam)—Cooling)

L 29147-66 EWP(j)/EWI(m) RM

ACC NR: AP6018677

SOURCE CODE: UR/0075/65/020/009/0990/0993

AUTHOR: Luskina, B. M.; Terent'yev, A. P.; Gradskeya, H. A.

ORG: none

TITLE: Organoelemental analysis by the "wet oxidation method". Report 9. Analysis of
Silicotitanophosphoroorganic compounds

SOURCE: Zhurnal analiticheskoy khimii, v. 20, no. 9, 1965, 990-993

TOPIC TAGS: ion exchange resin, organic phosphorous compound, organosilicon
compound, organotitanium, photometry, quantitative analysis

ABSTRACT: A method was developed to determine the content of
silicon, titanium, and phosphorus in silicotitanophosphoroorganic
compounds using a single sample. Ion exchange resins were found
to be useful. It was established that in the analysis of silico-
titanophosphoroorganic compounds titanium does not interfere with
the determination of phosphorus but phosphates interfere with the
photometric determination of titanium with hydrogen peroxide. So
optimum conditions were selected for separating titanium from
phosphorus with the KU-2 resin after oxidation of the analyzed
compounds by the "wet" method. When a solution containing these
elements is passed through a column packed with KU-2 resin, tita-
nium is retained by the resin but phosphorus (as phosphoric acid)

Card 1/2

UDO: 543.80

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41
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L 29147-66

ACC NR: AP6018677

passes into the filtrate. Completeness of titanium separation is controlled with hydrogen peroxide. Further, titanium is washed from the column with a 4 N solution of hydrochloric acid and determined photometrically. If the acidity of the solution does not exceed 2 vol. % of sulfuric acid, titanium is completely separated from phosphorus. The volume of solution passed through the column was 100 ml at the rate of 5 ml/min. The optimal conditions were confirmed both on titanophosphoroorganic compounds and also in a silicoorganic compound containing titanium and phosphorus. Results are presented in a table, Ye. D. Kropotova participated in the experimental work. Orig. art. has: 2 tables. JPRS

SUB CODE: 07 / SUBM DATE: 29May64 / ORIG REF: 005 / OTH REF: 002

Card 2/2 CC

GLAGOLEVA, Ye.P.; GRADSKAYA, N.N.; KOLOSOV, A.K.; MYULLER, V.V.; SAVUSHKINA,
A.S.; CHALOVA, Ye.A.

New small-size e.m.f. meters. Nev.nauch.-issl.rab.po metr. VNIM
no.4:4-6 '64. (MIRA 18:3)

GRADSKIY, Mikulash [Gradsky, M.], doktor med.nauk; VORTEL', Vladimir,
~~prof.~~ doktor med.nauk; GEROUT, Vladimir [Herout, V.], doktor
med.nauk (Chekhoslovakiya)

Stomach biopsy in clinical practice. Klin.med. no.7:12-19
'61. (MIRA 14:8)

1. Iz kliniki propedeutiki vnutrennikh bolezney meditsinskogo
fakul'teta Karlova universiteta v Gradtse Karlove (rukovoditel' -
dotsent, doktor med.nauk F.Chernik) i iz patologoanatomicheskogo
instituta meditsinskogo fakul'teta Karlova universiteta v Gradtse
Karlove (rukovoditel' - doktor med.nauk prof. A. Fingerland).
(STOMACH) (BIOPSY)

KUSAKIN, I.; GRADSKIY, Ya., inzh.

More about the hinged pipes designed by engineer A.K. Godyma.
Avt. dor. 28 no.2:10 F' 65. (MIRA 18:6)

1. Nachal'nik dorozhno-ekspluatatsionnogo uchastka No.137
Upravleniya Azovo-Chernomorskikh avtomobil'nykh dorog (for
Kusakin).

L 29147-66 EWP(j)/ENT(m) RM

ACC NR: AP6018677

SOURCE CODE: UR/0075/65/020/009/0990/0993

AUTHOR: Luskina, B. M.; Terent'yov, A. P.; Gradszkova, N. A.

43
41
B

ORG: none

TITLE: Organoelemental analysis by the "wet oxidation method". Report 9. Analysis of Silicotitanophosphoroorganic compounds

SOURCE: Zhurnal analiticheskoy khimii, v. 20, no. 9, 1965, 990-993

TOPIC TAGS: ion exchange resin, organic phosphorous compound, organosilicon compound, organotitanium, photometry, quantitative analysis

ABSTRACT: A method was developed to determine the content of silicon, titanium, and phosphorus in silicotitanophosphoroorganic compounds using a single sample. Ion exchange resins were found to be useful. It was established that in the analysis of silico-titanophosphoroorganic compounds titanium does not interfere with the determination of phosphorus but phosphates interfere with the photometric determination of titanium with hydrogen peroxide. So optimum conditions were selected for separating titanium from phosphorus with the KU-2 resin after oxidation of the analyzed compounds by the "wet" method. When a solution containing these elements is passed through a column packed with KU-2 resin, titanium is retained by the resin but phosphorus (as phosphoric acid)

Card 1/2

UDC: 543.80

L 29147-66

ACC NR: AP6018677

passes into the filtrate. Completeness of titanium separation is controlled with hydrogen peroxide. Further, titanium is washed from the column with a 4 N solution of hydrochloric acid and determined photometrically. If the acidity of the solution does not exceed 2 vol. % of sulfuric acid, titanium is completely separated from phosphorus. The volume of solution passed through the column was 100 ml at the rate of 5 ml/min. The optimal conditions were confirmed both on titanophosphoroorganic compounds and also in a silicoorganic compound containing titanium and phosphorus. Results are presented in a table, Ye. D. Kropotova participated in the experimental work. Orig. art. has: 2 tables. [JPRS]

SUB CODE: 07 / SUBM DATE: 29May64 / ORIN REF: 005 / OTH REF: 002

Card 2/2 CC

LUSKINA, B.M.; TERENT'YEV, A.P.; GRADSKOVA, N.A.

Metalorganic analysis by the "wet combustion" method. Report No.8:
Analysis of silicophosphoroaluminum organic compounds. Zhur.anal.khim.
19 no.10:1251-1253 '64. (MIRA 17:12)

LUSKINA, B.M.; TEREENT'YEV, A.P.; GRADSKOVA, N.A.

Organometallic analysis by the "wet oxidation" method. Report 9:
Analysis of silicon-titanium-phosphorus organic compounds. Zhur.
anal. khim. 20 no.9:990-993 '65. (MIRA 18:9)

RUMANIA

616.981.71

GRADU, Mariana, SARATEANU, D., POPESCU, Georgeta, TEODOSIU, Otilia, PETRESCU, Al., DEMETRESCU, R., and GHEORGHIU, V., of the Institute of Inframicrobiology (Institutul de Inframicrobiologie) of the Academy of the Socialist Republic of Rumania (al Academiei Republicii Socialiste Romania).

"The Isolation of an Inframicrobic Agent from Amicrobic Urethrites."

Bucharest, Studii si Cercetari de Inframicrobiologie, Vol 17, No 6, 66, pp 465-472.

Abstract: The authors report the isolation from amicrobic urethrites of several inframicrobic strains; 16 were isolated by inoculation in embryonated chicken eggs, and 6 by intranasal inoculation in white mice. The strains could be adapted to primary cultures of human embryo fibroblasts, and were classified as being part of the Pararickettsia group (Miyagavanella) on the basis of their morphologic and biologic characteristics.

Includes 5 figures, 4 tables and a bibliography with 32 references, of which 5 Rumanian, one German, 2 French and 24 English-language. -- Manuscript submitted 6 September 1966.

L 20828-66 ENT(1) GW

ACCESSION NR: AP5019158

UR/0362/65/001/007/0767/0770
551.521.32

1

6

B

AUTHOR: Gradus, L.M.; Feygel'son, Ye. M.

TITLE: Influence of cloudiness on the radiation heat inflow^{v?} into the atmosphere

SOURCE: AN SSSR. Izvestiya. Fizika atmosfery i okeana, v. 1, no. 7, 1965, 767-770

TOPIC TAGS: atmospheric heat flow, atmospheric heat balance, atmospheric heat distribution, cloud

ABSTRACT: In spite of its obviousness, the influence of the cloudiness on the magnitude and distribution of heat within the atmosphere has only rarely been the object of quantitative estimates. The present study of a simplified model assumes that the horizontally stratified, optically dense cloud layers are shifting from low altitudes towards the high limits of the troposphere. It calculates the integral inflows (over the thickness of the subcloud and supercloud layer) of long-wave radiations, as well as the total inflow over the entire thickness of the atmosphere. The temperature and humidity distributions are assumed given, and the calculation is based on a linear temperature profile. The heat influx is given as a function of the cloud level altitude. Results also show that previous work (H. Takahashi, A. Katayama, T. Asakura, Meteorol. Soc. Japan, 38, no. 4, 1960)

Card 1/2

L 20828-66

ACCESSION NR: AP5019158

took into account the cloud cover induced decrease in the effective radiation of the Earth's surface, but did not account for the compensating effect of the radiation from the upper boundary of the cloud layer. Orig. art. has: 14 formulas and 4 tables.

ASSOCIATION: Institut fiziki atmosfery, Akademiya nauk SSSR (Institute of the Physics of the Atmosphere, Academy of Sciences, SSSR)

SUBMITTED: 21Jan65

ENCL: 00

SUB CODE: ES

NO REF SOV: 003

OTHER: 002

Card 2/2 vmb

GRADUS, Yu.M., ved. red.

[New methods of obtaining and purifying gases; collection of translations] Novye metody polucheniia i ochistki gazov; sbornik perevodov. Moskva, 1961. 52 p. (MIRA 15:7)

1. Moscow. Gosudarstvennyy nauchno-issledovatel'skiy institut nauchnoy i tekhnicheskoy informatsii.
(Gases--Purification)

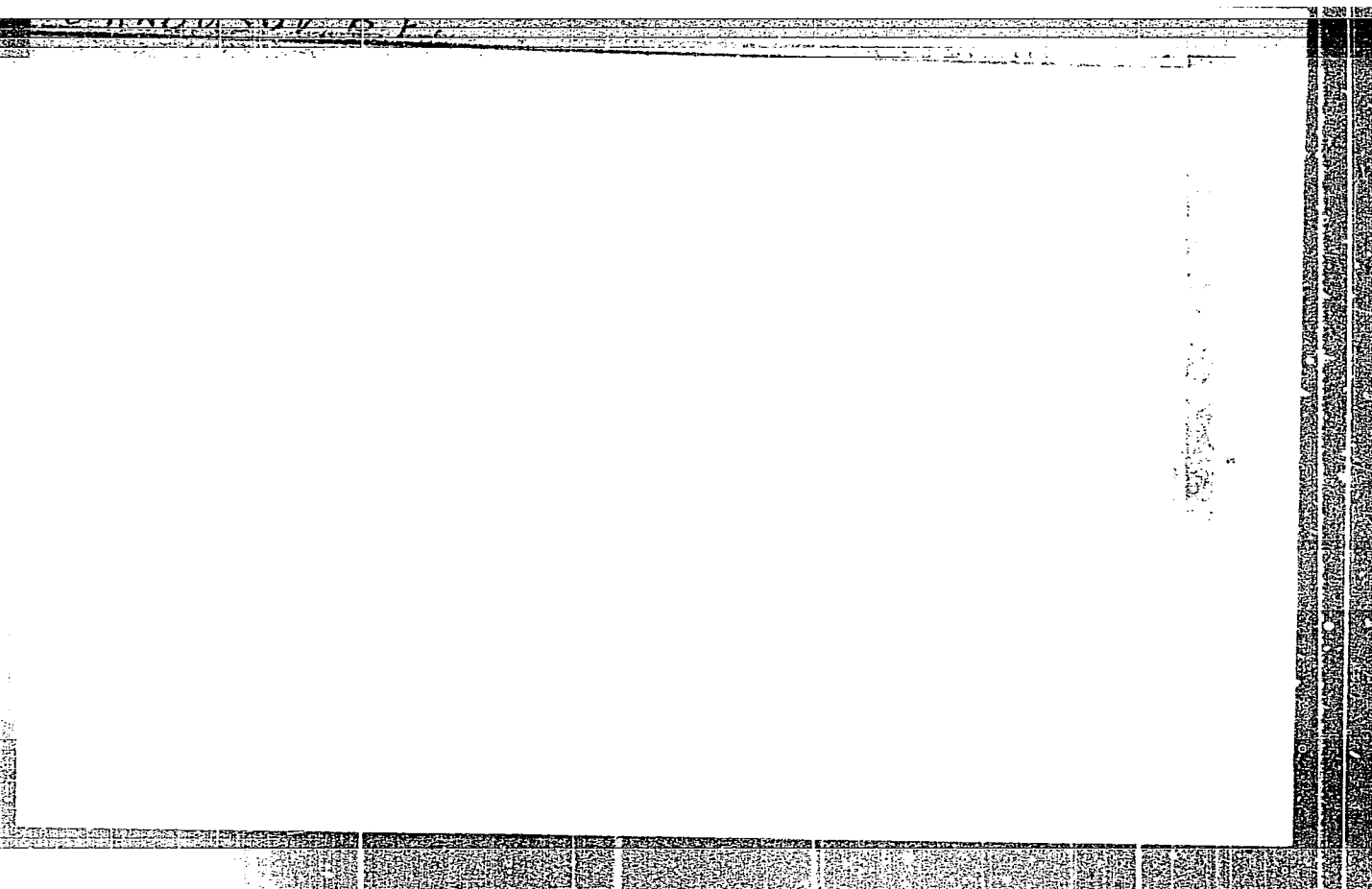
GRADUSOV, B. F.

"Opacity of Stellar Matter Rich in Dilute Hydrogen and Helium." Cand Phys-Math Sci,
Moscow Oblast Pedagogical Inst, 11 Feb 54. Dissertation. (Vechernyaya Moskva Moscow 2 Feb 54,

SO: SUM 186 19 Aug 1954

"APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000516520002-0



APPROVED FOR RELEASE: 03/13/2001

CIA-RDP86-00513R000516520002-0"

MIGUNOV, A.M.; POVALISHNIKOVA, A.S.; GRADUSOV, B.F.

Ultrasound absorption in methyl acetate and its mixtures
with methyl alcohol. Prim. ul'traakust. k issl. veshch.
no.13:213-218 '61. (MIRA 16:6)

(Absorption of sound)

(Methanol—Acoustic properties)

(Acetic acid—Acoustic properties)

GRADUSOV, B.P.; URUSEVSKAYA, I.S.

Chemical and mineral composition of silty fractions in gray
forest soils of Kaluga Province. Vest. Mosk. un. Ser. 6;
Biol., pochv. 19 no.3:21-29 My-Je '64. (MIRA 17:12)

1. Kafedra geografii pochv Moskovskogo universiteta.

GRADUSOV, B.P.

Effect of forest litter on the chemical properties of soils in
the southern taiga subzone [with summary in English]. Pochvovedenie
no.8:111-116 Ag '58. (MIRA 11:9)

1. Pochvennyy institut im. V.V. Dokuchayeva AN SSSR.
(Forest soils)

GRADUSOV, B.P.

Chemico-mineralogical characteristics of soils in the
central part of the Karelian Isthmus. Pochvovedenie
no.7:53-62 '60. (MIRA 13:7)

1. Pochvennyy institut im. V.V.Dokuchayeva Akademii nauk
SSSR.

(Karelian Isthmus--Soils--Composition)

GRADUSOV, B.P.; TARGUL'YAN, V.O.

Minerals of the silt fraction in soils developed on igneous rocks
of the Eastern Sayans. Pochvovedenie no.11:24-33 N '62.
(MIRA 16:1)

1. Pochvennyy institut imeni V.V.Dokuchayeva.
(Sayan Mountains—Minerals in soil)

GOREUNOV, N.I.; PRUSINKEVICH, Z.; GRADUSOV, B.P.

Formation of clayey minerals in Podzolic soils on sandy rocks of various ages. Pochvovedenie no.8:48-57 Ag '63. (MIRA 16:9)

1. Pochvennyy institut imeni V.V.Dokuchayeva.

GORBUNOV, N.I.; GRADUSOV, B.P.; TRAVNIKOVA, L.S.

Formation and characteristics of vermiculites as related to
their use in agriculture. Pochvov lenie no.11:1-10 N '64
(MIRA 18:1)

1. Pochvennyy institut imeni V.V. Dokuchayeva, AN SSSR, Moskva.

LABENETS, Ye.M.; Primali uchastiye: GRADUSOV, B.P.; CHIZHIKOVA, N.P.

Chemical and mineralogical characteristics of the meadow
Soloth soils in the Krasnoznamensk Canal zone. Pochvovedenie
no.11:44-59 N '64 (MIRA 18:1)

1. Pochvennyy institut imeni V.V. Dokuchayeva AN SSSR, Moskva.

28 (5), 18 (7)

05730

AUTHORS: Tolstaya, M. A., Bogatyreva, S. V.,
Gradusov, G. N.

SOV/32-25-10-19/63

TITLE: Removal of Corrosion Products From Various Steels

PERIODICAL: Zavodskaya laboratoriya, 1959, Vol 25, Nr 10, pp 1205 - 1206
(USSR)

ABSTRACT: A valuation of the corrosion resistance of corrosion-resistant steels in tests in pure water at high temperatures is rather difficult since the corrosion rate is low. The method of cathodic removal of test samples in appropriate media is most favorable. To find a reliable method, a cathodic removal to a constant weight, and comparative experiments by ordinary removal in acids with delayers, were carried out in the present case. Plane and cylindric samples with surfaces of 10-20 cm and a weight of 8-15 g were tested in a special device (Figure). The loss in weight after the cathodic removal was 0.0010-0.0030 g for stainless steel, and 0.0050-0.0200 g for carbon steel. The corrosion products of the austenitic stainless steel represented a more or less dense velvetlike film of magnetite with admixtures of nickel- and chromium oxides, under which there was a second oxide film that could not be removed. The first-men-

Card 1/2

Removal of Corrosion Products From Various Steels

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SOV/32-25-10-19/63

tioned oxide film could be detached by cathodic removal in 2.5% H_2SO_4 with urotropine (as a delayer), as well as 5% H_2SO_4 with 5-6 g/l of urotropine, at 65-70° and a current density of 0.1-0.2 a/cm² in 40-60 minutes. The corrosion products of the carbon steel represented a thick, black magnetite film with poor adhesion to the metal surface which was easily removed in the alkaline medium (8% NaOH). Thus, the corrosion of austenitic stainless, carbon, and poorly or medium-alloyed steels in water at high temperatures can be rated by the loss in weight of the sample after cathodic removal in different media. There are 1 figure and 1 Soviet reference.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Power Engineering Institute)

Card 2/2

S/081/61/000/020/059/089
B102/B147

AUTHORS: Tolstaya, M. A., Bogatyreva, S. V., Gradusov, G. N.

TITLE: Removal of corrosion products from steels after testing in water at high temperatures

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 20, 1961; 263, abstract 20I190 (Sb. "Korroziya reaktorn. materialov". M., Atomizdat, 1960, 20 - 28)

TEXT: In order to remove corrosion products formed under the action of water at high temperatures it is recommended that the method of cathodic treatment should be used for austenitic stainless steel specimens at different temperatures and at $D_c = 0.1 - 0.2 \text{ a/cm}^2$ until constant weight is reached in 2.5 - 5.0% H_2SO_4 solution with Urotropin as a corrosion inhibitor. Treatment in 8% NaOH solution at 70°C and at $D_c = 0.05 - 0.1 \text{ a/cm}^2$ is recommended for carbon steels. It is noted that control specimens should be treated under optimum conditions. [Abstracter's note: Complete Card 1/2]

Removal of corrosion products...

S/081/61/000/020/059/089
B102/B147

translation.]

Card 2/2

18.8310

28569

S/137/61/000/009/077/087
A060/A101

AUTHORS: Tolstaya, M. A., Gradusov, G. N., Bogatyreva, S. V.

TITLE: Effect of electric polishing upon the corrosion resistance of steel 1X18H9T (1Kh18N9T) and carbon steel 20 in water at high temperatures

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 9, 1961, 54, abstract 9I368 (V sb. "Korroziya reaktorn. materialov", Moscow, Atomizdat, 1960, 167-184)

TEXT: Corrosion tests were carried out on stainless steel 1Kh18N9T steel containing 5% Cr and 2% Mo, and carbon steel 20 in water of high purity and high-grade parameters. The tests were carried out in autoclaves at 310°C and 100 atm for various time durations (from 100 to 1,500 hours). Mechanical and, in particular, electrolytic polishing reduce the corrosion rate of the enumerated grades of steel. Cleansing of carbon steel 20 by the method of cathodic scouring before testing raises its corrosion resistance. Alloying of steel with chromium up to < 12% does not lead to the creation of corrosion resistant steels. The periodic removal of the corrosion products from the steel by the method of cathodic scouring causes practically no change in the total corrosion rate.

Card 1/2

Effect of electric polishing upon ...

28569

S/137/61/000/009/077/087
A060/A101

The main inhibiting action upon the rate of steel corrosion in high-purity water with high-grade parameters is exerted not by the layer of oxides separated in the course of cleansing, but by a thin oxide film, located just under the former, inseparable from the metal surface. There are 9 references.

Ye. Layner

[Abstracter's note: Complete translation]

Card 2/2

18-8300

28570 S/137/61/000/009/083/087
A060/A101

AUTHORS: Tolstaya, M. A., Gradusov, G. N., Bogatyreva, S. V.

TITLE: Investigation of the corrosion mechanism in zirconium alloys alloyed with niobium in high-purity water

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 9, 1961, 55, abstract 9I374 (V sb. "Korroziya reaktorn. materialov". Moscow, Atomizdat, 1960, 250-263)

TEXT: The corrosion mechanism was investigated in Zr-alloys containing 1 and 2.5% Nb in water of high purity at a temperature of 90°C saturated with various gases (O, N, air, and H). The corrosion of the Zr-Nb alloy under these conditions is arrested by the passivation of the metal and by the formation of a strong protective film. The effectiveness of the cathodic process is mainly determined by the rate of O ionization, and not by the intensity of its diffusion in the metal. The corrosion rate of Zr alloys depends little upon the quantity of O in the water. The determining factor of inhibition in this process remains the passivation of the metal. The presence of H in the water affects the corrosion of Zr alloys little. The presence of contacts between the Zr alloy

Card 1/2

Investigation of the corrosion mechanism ...

285708/137/61/000/009/083/087
A060/A101

and steel 1X18H9T (1Kh18N9T) in water of high purity presents no danger. Defects in the metal surface, the presence in the water of compounds forming complexes with Zr, activate the Zr and raise the corrosion rate. There are 9 references.

Ye. Layner

[Abstracter's note: Complete translation]

Card 2/2

188300

28313

S/081/61/000/016/021/040
B106/B101

AUTHORS: Tolstaya, M. A., Gradusov, G. N., Bogatyreva, S. V.

TITLE: Study of the corrosion resistance of zirconium-alloy tubes in water at high temperatures

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 16, 1961, 305-306, abstract 161167 (Sb. "Korroziya reaktorn. materialov". M., Atomizdat, 1960, 264-274)

TEXT: It was found that the corrosion rate of Zr alloyed with Nb, in water at 263-310°C and at pressures of 50-100 atm is 0.0016-0.0020 g/m²·hr or 0.0021-0.0027 mm per year. It is pointed out that a rough surface treatment of the alloy accelerates the detachment of the protective skin and favors the corrosion. The occurrence of fluorine ions on the metal surface after its etching increases the corrosion rate of zirconium and its alloys. [Abstracter's note: Complete translation.]

Card 1/1

GRADUSOV, G. N.

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PHASE I BOOK EXPLOITATION

SOV/5256

Gerasimov, Valentin Vladimirovich, ed., Candidate of Chemical Sciences.

Korroziya reaktornykh materialov; sbornik statey (Corrosion of Nuclear-Reactor Materials; a Collection of Articles) Moscow, Atomizdat, 1960. 284 p. 3,700 copies printed.

Ed.: A.I. Zavodchikova; Tech. Ed.: Ye.I. Mazel'.

PURPOSE: This collection of articles is intended for mechanical and metallurgical engineers as well as for scientific research workers concerned with the construction of nuclear reactors.

COVERAGE: The water corrosion of various types of stainless steel and alloys under high pressures and temperatures is investigated from the point of view of the use of these materials for the construction of nuclear reactors. Attention is given to the following: the use of oxygen for protecting steel against corrosion, the behavior of steel in high-temperature

Card 1/8

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Corrosion of Nuclear- (Cont.)

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water with various compositions, factors of metal stress corrosion, intergranular corrosion, the mechanism of corrosion cracking, and the corrosion resistance of aluminum and zirconium alloys. Conclusions based on test results are included. No personalities are mentioned. Most of the articles are accompanied by references. Of 238 references 97 are Soviet.

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- vestigating the Mechanism of High-Purity Water Corrosion of
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- Tolstaya, M. A., G. N. Gradusov, and S. V. Bogatyreva. In-
vestigating Water Corrosion Resistance of Zirconium Alloy
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Electrochemical Behavior of Zirconium 274
- Andronov, G. G., and N. K. Komarova. Removing Corrosion
Products From the Heat Exchanger of a Reactor 277
- AVAILABLE: Library of Congress (TA462.G4)

Card 9/9

VK/wrc/bc
10-12-61

18.8300

S/096/60/000/010/020/022

E194/E135

AUTHORS: Tolstaya, M.A., Gradusov, G.N., and Bogatyreva, S.V.

TITLE: The Corrosion Resistance of Zirconium Alloys in Water
at High Temperatures

PERIODICAL: Teploenergetika, 1960, No 10, p 95

TEXT: Tubular specimens were tested at temperatures of 263 °C (50 atm) and 310 °C (100 atm) in pure water and in water containing chlorine ions (10 mg/litre) for 2300 hours. It was established that the corrosion rate was greatly influenced by the quality of the surface treatment of the specimen and by contact with teflon linings. The other factors investigated did not affect the rate of corrosion.

ASSOCIATION: Moskovskiy energeticheskiy institut
(Moscow Power Institute)

Card 1/1

20172

18.8310 1138,1454, 1573

S/089/61/010/003/002/021
B108/B209

AUTHORS: Tolstaya, M. A., Bogatyreva, S. V., Gradusov, G. N.

TITLE: Resistance of steels and zirconium alloys to corrosion in solutions of boric acid at different temperatures

PERIODICAL: Atomnaya energiya, v. 10, no. 3, 1961, 222-226

TEXT: For an emergency stop of water-cooled water-moderated reactors, boric acid solution with a boron concentration of about 1 g/l may be introduced into the water of the first circuit. Such a system is, for instance, installed in the "Yankee" nuclear power station. It was the aim of the present work to examine the influence of boric acid solutions upon the corrosion resistance of the structural materials of the first circuit in a water-cooled water-moderated reactor. The specimens were parts of tubes and plates of 1X18H9T (1Kh18N9T)-type steel, steel 20, and zirconium alloys containing 1 and 2.5% niobium. The surface of the specimens was subjected to electropolishing, mechanical polishing, and etching. These experiments were carried out under static conditions in

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S/089/61/010/003/002/021
B108/B209

Resistance of steels and zirconium ...

an autoclave of stainless 1Kh18N9T steel at pressures between 100 and 140 atm and at saturation temperature. In other experiments made at 40°C and atmospheric pressure, specimens were studied simultaneously in boric acid solution and highly pure water. The specimens were plates of steel of the types 1Kh18N9T, OX13 (OKh13), x5M2 (Kh5M2), and 20, as well as of zirconium with 2.5% niobium. The solutions were analyzed for their boron content by colorimetric photometry with carmine red as indicator. Moreover, the penetration of boron into the metals was studied spectrographically, by removing 0.05-0.1 mm thick shavings from the surface which had been carefully rinsed. The rate of corrosion was determined by weighing the specimens with an accuracy of 0.1 mg. The steel specimens showed a decrease in weight after the corrosion products had been removed; the corrosion rate of the zirconium alloys was determined from the excess weight of the specimens. Table 1 shows the rates of corrosion in boric acid solutions with a pH of 5.8-5.5 at 335°C and 140 atm. In solutions of higher H_3BO_3 concentration (5.65 g/l) with a pH of 5.2, a temperature of 310°C and a pressure of 100 atm, an investigation for 150 hrs gave the following results: The rate of corrosion of

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20172

Resistance of steels and zirconium ...

S/089/61/010/003/002/021
B108/B209

1Kh18N9T steel was nearly the same as that shown in Table 2 when converted to 1000 hrs. At 40°C, carbon steel 20 was considerably affected by pure water and by the acid, thus forming crumbly corrosion products. Kh5M2-type steel corroded more slowly than carbon steel. The corrosion of OKh13-type ferrite steel was insignificant in both media. Spectrographic analysis showed that boron did not penetrate into the steel. Zirconium alloys, however, adsorb boron from high-parameter boric acid solutions, so that the boron content exceeds the admissible concentration in the alloy by 2-3 orders of magnitude. Boron obviously takes root in the ZrO_2 surface layer of zirconium alloys during corrosion in high-parameter solutions. The results show that boric acid solutions may be used for "soft" reactor control. An emergency injection of boric acid must not damage the materials of the first circuit. Boric acid does not decompose in pure water. OKh13-type ferrite steel is recommended for the construction of storing tanks. There are 4 tables and 4 references: 3 Soviet-bloc.

SUBMITTED: June 6, 1960

Card 3/4

20172

S/089/61/010/003/002/021
B108/B209

Resistance of steels and zirconium ...

Legend to Table 1: Corrosion

rate, $\text{g/m}^2 \cdot \text{hr}$. 1) 1Kh18N9T-type steel; 2) zirconium alloy with 2.5% niobium; 3) zirconium alloy with 1% niobium; 4) steel 20. A) Highly pure water;

B) pure water + 0.23 g/l H_3BO_3 ;

C) pure water + 1.13 g/l H_3BO_3 .

a) No treatment; b) mechanically polished; c) electropolished;

d) polished and etched (with 5% concentrated HF, 45% concentrated HNO_3 , 50% water).

ВОДА ВЫСОКОЙ ЧИСТОТЫ A)	ВОДА ВЫСОКОЙ ЧИСТОТЫ С ДО- БАВКОЙ 0,23 г/л H_3BO_3 B)	ВОДА ВЫСОКОЙ ЧИСТОТЫ С ДОБАВ- КОЙ 1,13 г/л H_3BO_3 C)
0,0005 a) 0,0003 b) 1) 0,0001 c)	0,0007 0,0009 0,0002	0,0007 0,0008 0,0006
0,0011 a) 2) 0,0013 d)	0,0011 0,0012	0,0015 0,0016
0,0008 d) 3) 0,0015 b)	0,0010 0,0014	0,0009 0,0011
0,0040 a) 4) 0,0019 c) — b)	0,0037 0,0019 0,0035 Table 1	0,0041 0,0021 0,0038

Card 4/4

TOLSTAYA, M.A.; GRADUSOV, G.N.; BOGATYREVA, S.V.

[Effect of electrolytic polishing on the corrosion
resistance of 1Kh18N9T steel and of carbon steel 20,
in water at high temperatures] Vliianie elektropolirovki
na korrozionnuu stoikost' stali 1Kh18N9T i uglerodistoi
stali-20 v vode pri vysokikh temperaturakh. Moskva,
Glav.upr. po ispol'zovaniu atomnoi energii, 1960. 14 p.
(MIRA 17:1)

(Steel--Corrosion)
(Electrolytic polishing)

GRADUSOV, N. M. Engineer

ENIMS(-1946-)

"The Control of Modern Automatics" Stanki I Instrument,
17, No. 4-5, 1946

BR-52059019

GRADUSOV, N. M.

ENTIS (-1946-)

"The Control of Modern Automatics (Conclusion)
Stanki I Instrument, 17, No. 6, 1946.

BR-52059019

GRADUSOV, N.M.

Electric contact profiling devices. Stan. 1 instr. 24 no.6:17-20 Je '53.
(MLEA 6:7)
(Milling machines)

1. K. V.

"Development, Application, and Investigation of a Copying Device with a Two-Position Tracer for Lathes and Milling Machines." Sankh Tech Sci. Moscow Machine and Tool Inst
Academi I. V. Stalin, 24 Feb 54. Dissertation (Veshernyaya Moskva. Moscow, 12 Feb 54)

CC: SU. 106, 12 Aug 1954

GRADUSOV, N. M.

112-3-6577

Translation from: Referativnyy Zhurnal, Elektrotehnika, 1957, Nr 3,
p. 210 (USSR)

AUTHOR: Gradusov, N.M.

TITLE: Classification of Copying Devices Used with Metal-
Cutting Machine Tools (Klassifikatsiya kopiroval'nykh
ustroystv, primenyayemykh v metallorezhushchikh
stankakh)

PERIODICAL: In Sbornik: Avtomatizatsiya tekhnol. protsessov v
machinostr. Privod i upravleniya mashinami, Moscow,
AN SSSR, 1956, pp. 133-139

ABSTRACT: Bibliographic entry.

Card 1/1

25(2)

PHASE I BOOK EXPLOITATION SOV/1689

Gradusov, N.M., L.O. Likht, E.I. Kalinkina, and V.A. Kudinov

Modernizatsiya tokarnykh mnogoshpindel'nykh avtomatov i poluavtomatov;
rukovodyashchiye materialy (Modernization of Automatic and Semi-
automatic Multi-spindle Lathes; Instructions) Moscow, Mashgiz,
1958. 118 p. 6,500 copies printed.

Sponsoring Agency: Moscow. Eksperimental'nyy nauchno-issledovatel'skiy
institut metallorezhushchikh stankov.

Ed.: A. Ye. Prokopovich; Tech. Ed.: A. Ya. Tikhanov; Managing Ed. for
Literature on Metalworking and Tool Making: R.D. Beyzel'man.

PURPOSE: This book is intended for production workers who work with
machine tools, for plant designers and for processing engineers.

COVERAGE: The authors analyze the existing stock of multispindle
automatic and semiautomatic lathes and determine the main outlines

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Modernization of Automatic (Cont.)

SOV/1689

for their modernization. They describe various devices which broaden the operating potential of automatic lathes and discuss the problem of increasing their rigidity and vibration resistance. No personalities are mentioned. There are 28 references, of which 26 are Soviet, 1 is German and 1 English.

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Modernization of Automatic (Cont.)

SOV/1689

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Modernization of Automatic (Cont.)

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Stock of Multispindle Automatic and Semiautomatic Lathes 116

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AVAILABLE: Library of Congress (TJ1218.M6565)

GO/hcr
8 June 59

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		PROCESSIES AND PROPERTIES INDEX																									
		1ST AND 2ND CROSS																									
	M																										
<p>*Researches on Copper Alloys Containing Cadmium. P. I. Gradusky (<i>Metal lurg (The Metallurgist)</i>, 1932, 7, (9), 79-83; <i>Chem. Zentr.</i>, 1934, 105, 1, 2033). [In Russian.] The value of copper alloys with 0.5-2% cadmium for deoxidizing copper has been investigated. Under the same conditions as used when phosphor-copper is employed as deoxidant, the loss of cadmium does not exceed 2% of that added. The addition of small quantities of cadmium to copper increases the tensile strength, but reduces the conductivity; for hot-rolling the copper should be heated to 780°-800° C. With increasing cadmium content the intensity of recrystallization of hard-drawn copper is increased; 600° C. is the best annealing temperature for cadmium-copper, and 0.8% cadmium gives the best combination of mechanical and electrical properties. —A. R. P.</p>																											
<p>ASD-SLA METALLURGICAL LITERATURE CLASSIFICATION</p>																											
<p>SECTION MAP ONLY JSC</p>																											
<p>RELATIONS</p>																											
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<p><i>Determination of the Interval of Plasticity of Heat-Resistant Alloys for Hot-Rolling.</i> P. I. Gradusov (<i>Zavod. Lab.</i>, 1934, 2, 265-267; <i>Brit. Chem. Abs.</i>, 1934, [B], 678).—[In Russian.] Methods are described.—S. G.</p>																			
ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION																			
1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									

COMMON ELEMENTS		COMMON VALUABLE METALS	
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9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24
25	26	27	28
29	30	31	32
33	34	35	36
37	38	39	40
41	42	43	44
45	46	47	48
49	50	51	52
53	54	55	56
57	58	59	60
61	62	63	64
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73	74	75	76
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85	86	87	88
89	90	91	92
93	94	95	96
97	98	99	100

BC

B-I-C

PROCESSES AND PROPERTIES INDEX

Standard manganese containing aluminum, and its properties. P. I. CHADURON (Isvet. Met., 1934, No. 6, 201-203). Manganese (Cu 80, Mn 12, Ni 5%) in which Al replaces Ni behaves during melting, pouring, and heat treatment like the ordinary alloy. The sp. resistance of the Al-manganese increases with the tempering temp. In practice it can be used up to 400°.

for Abs. (c)

ASB-51A METALLURGICAL LITERATURE CLASSIFICATION

FROM SYMBOLIC

SECONDARY METAL

THIRDARY METAL

FOURTHARY METAL

FIFTHARY METAL

SIXTHARY METAL

SEVENTHARY METAL

EIGHTHARY METAL

NINTHARY METAL

TENTHARY METAL

ELEVENTHARY METAL

TWELFTHARY METAL

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TWENTYTHARY METAL

ONE AND TWENTYTHARY METAL

TWO AND TWENTYTHARY METAL

THREE AND TWENTYTHARY METAL

FOUR AND TWENTYTHARY METAL

FIVE AND TWENTYTHARY METAL

SIX AND TWENTYTHARY METAL

SEVEN AND TWENTYTHARY METAL

EIGHT AND TWENTYTHARY METAL

NINE AND TWENTYTHARY METAL

TEN AND TWENTYTHARY METAL

ELEVEN AND TWENTYTHARY METAL

TWELVE AND TWENTYTHARY METAL

THIRTEEN AND TWENTYTHARY METAL

FOURTEEN AND TWENTYTHARY METAL

FIFTEEN AND TWENTYTHARY METAL

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EIGHTEEN AND TWENTYTHARY METAL

NINETEEN AND TWENTYTHARY METAL

TWENTY AND TWENTYTHARY METAL

191 AND 190, ORDERS

PROCESSES AND PROPERTIES INDEX

M

*Mechanical Properties of Double Manganin. P. I. Gradyov, (*Zvezdye Metallo* (Non-Ferrous Metals), 1994, (6), 105-111; C. Abz., 1035, 29, 4315). [In Russian.] Samples of double Manganin containing copper 71.49, manganese 20.70, and aluminium 6.11%, were tempered at 530°, 600°, 650°, 700°, 750° and 800° C., and their mechanical properties were then studied. Heating to 800° C. followed by slow cooling gives the best results. N. G.

ASM-A6 METALLURGICAL LITERATURE CLASSIFICATION

191 AND 190, ORDERS

1ST AND 2ND COLUMNS		3RD AND 4TH COLUMNS	
PROCESSES AND PROPERTIES INDEX			
<p><i>M</i></p> <p>*α-Aluminium-Bronze and Its Mechanical Properties. P. I. Gradovoy. <i>(Zvezdy Metally (Non-Ferrous Metals), 1964, (7), 126-137; C. Abs., 1935, 20, 4315).—[In Russian.]</i> α-Aluminium-"bronze," containing 6.5 ± 0.5% aluminium and the remainder copper, is a good substitute for bronzes containing (1) tin 4, zinc 3, copper 63%, or (2) tin 6.5, phosphorus 0.4, copper 93.1%. The α-aluminium-"bronze" was melted in an oil-fired furnace. The alloy contained 6-8% aluminium and was used in a series of mechanical tests. Its mechanical strength at temperatures up to 800° C. was 1.5 times that of phosphor-bronze. The α-aluminium-"bronze" was free from defects. It was rolled, first hot and then cold, into plate, rod, and wire. It has good plastic qualities and is suitable for the production of springs. It is not inferior to phosphor-bronze in corrosion-resistance to air or in solutions, and is also resistant to abrasion. It is recommended as a substitute for ordinary bronzes in machine construction, but not in the form of fine wire (e.g. in screens) of 0.30-0.07 mm. diameter.—S. (1).</p>			
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION			
FROM SYNONYMS		SIGNI HOMINY	
SYNONYMS		SIGNI HOMINY	
SYNONYMS		SIGNI HOMINY	

1ST AND 2ND INDEXES																										3RD AND 4TH INDEXES																																																																									
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<p>MECHANICAL PROPERTIES OF MUNTZ METAL LS-30 IN RELATION TO COPPER CONTENT. P. I. GRADUSOV. <i>Tsvetnaya Metal.</i> 1935, No. 4, 103-12. Several samples of Muntz metal were investigated with Cu varying from 87 to 91%, and Pb from 0 to 1%. Data are given illustrating effect of compn., treatment, hot and cold working, degree of reduction, etc., on the structure and mech. properties of the alloys. H. N. Daniloff</p>																																																																																																			
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<p>Rolling technic and properties of lead-bearing α-brasses. P. I. Gradusov. <i>Tsvetnaya Metal.</i> 1935, No. 5, 55-56.—A description of melting, casting, cold-rolling technique and properties of brasses containing 2.1 and 2.6% Pb. H. N. Daniloff</p>																									
<p>ASB-55A METALLURGICAL LITERATURE CLASSIFICATION</p>																									

1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
PROCESSES AND PROPERTIES INDEX																			
<div style="position: relative; height: 250px;"> M 2 <p style="text-align: center;"> *Standard Manganin Containing Aluminium, and Its Properties. P. 1. <i>Gradusny (Zvinye Metally (Non-Ferrous Metals), 1964, (6), 101-105; C. 164, 1935, 20, 4315).—[In Russian.]</i> Manganin (copper 85, manganese 12, nickel 3%), in which aluminium replaces nickel, behaves during melting, pouring, and heat-treatment like the ordinary alloy. Its mechanical properties are indistinguishable from those of the standard alloy when its tempering temperature is not above 700° C. The specific resistance of the aluminium-Manganin increases with increase of tempering temperature. In practice it can be used up to 400° C.—S. G. </p> </div>																			
<div style="display: flex; justify-content: space-between;"> <div> <p>ASG-51A METALLURGICAL LITERATURE CLASSIFICATION</p> <p>1ST AND 2ND ORDERS</p> </div> <div> <p>3RD AND 4TH ORDERS</p> </div> </div>																			

AKIMOVA, K.I.; BAZHENOV, M.F.; BAKHVALOV, G.T.; BEZKLUBENKO, N.P.; BERMAN, S.I.;
BOGDANOV, Ye.S.; BODYAKO, M.N.; BOYKO, B.B.; VINOGRADOV, S.V.;
GAGEN-TORN, K.V.; GIEK, T.P.; GOREV, K.V.; GRADUSOV, P.I.; GUSHCHINA, T.N.;
YEMEL'YANOV, A.K.; YESIKOV, M.P.; ZDZYARSKIY, A.V.; ZAKHAROV, M.V.;
ZAKHAROVA, M.I.; KARCHEVSKIY, V.A.; KOMAROV, A.M.; KORZHENKO, O.T.;
LAYNER, V.I.; MAL'TSEV, M.V.; MILLER, L.Ye.; MILOVANOV, A.I.;
MIRONOV, S.S.; NIKONOROVA, N.A.; OL'KHOV, N.P.; OSIPOVA, T.V.;
OSOKIN, N.Ye.; PERLIN, I.L.; PLAKSIN, I.N.; PROKOF'YEV, A.D.;
RUMYANTSEV, M.V.; SEVERDENKO, V.P.; SEREDIN, P.I.; SMIRYAGIN, A.P.;
SPASSKIY, A.G.; TITOV, P.S.; TURKOVSKAYA, A.V.; SHAKHNAZAROV, A.K.;
SHPICHINETSKIY, Ye.S.; YURKSHTOVICH, N.A.; YUSHKOV, A.V.;
YANUSHEVICH, L.V.

Sergei Ivanovich Gubkin. TSvet.met. 28 no.6:60-61 N-D '55. (MIRA 10:11)
(Gubkin, Sergei Ivanovich, 1898-1955)

GRADUSOV, P.I.; MUKHIN, N.I.

Use of MNMts20-20 alloys in elastic manometer elements. Trudy
Giprotstvetmetobrabotka no.18:313-323 '60. (MIRA 13:10)
(Copper-nickel-manganese alloys) (Manometer)

GRADUSOV, P.M.
GRADUSOV, P.M.

Refuse disposal plant in Leningrad. Zhil.-kom.khoz. 8 no.1:21-22
'58. (MIRA 11:1)
(Leningrad--Refuse and refuse disposal)

GRADUSOV, P.M., inzh.

Refuse-sorting station for Leningrad. Glg.1 san. 24 no.8:
49-52 Ag '59. (MIRA 12:11)

1. Iz Leningradskogo proyektnogo instituta "Lenproyekt"
Arkhitekturno-planirovchnogo upravleniya Leningradskoy oblasti.
(REFUSE DISPOSAL)

GRADUSOV, V.F., inzhener.

Graphic method of calculating thermal water softener of feed water for
locomobile boilers. Rab.energ. 3 no.5:26-28 My '53. (MLRA 6:5)
(Feed-water purification)

USSR/Farm Animals - Small Horned Stock

Q

Abs Jour : Ref Zhur - Biol., No 15, 1958, 69347

Author : Modyanov, A.V., Gradusov, Yu.N.

Inst : -

Title : Utilization of Urea and Other Synthetic Nitrogen
Compounds in Feeding Sheep

Orig Pub : S. kh. za rubezhom. Sb. perev. i obz. in. period. lit.,
1957, No 12, 134-157

Abstract : No abstract.

Card 1/1

GRADUSOV, Yu. N.: Master Agric Sci (diss) -- "A study of the effectiveness of urea for replacing a protein insufficiency in the rations of nursing lambs and ewes". Moscow, 1958. 17 pp (All-Union Sci Res Inst of Animal Husbandry, Dept of Feeding Agric Animals), 150 copies (KL, No 2, 1959, 123)

AUTHOR: Gradusov, Yu., Graduate Student SOV/29-58-9-1/30

TITLE: Proteins From the Air (Belok iz vozdukha)

PERIODICAL: Tekhnika molodezhi, 1958, Nr 9. pp 1 .. 2 (USSR)

ABSTRACT: In this paper the author approaches a problem which has hitherto remained unsolved, namely that of the use of proteins in cattle breeding. Chemistry succeeded even in solving this problem. Scientists arrived at the conclusion that proteins in the nutrition of cattle, sheep and goats can be replaced by simple nitrogen compounds. As the atmosphere is $3/4$ nitrogen and as nitrogen is produced from the air, there are practically unlimited resources for such products. The most simple method would be to transform this nitrogen into protein compounds and then to feed cattle with these substances. The production of synthetic protein, however, is still in its first stages. When this stage is surpassed science will have made great progress. In the study of the digestive processes it was found that cattle benefits from proteins by way of bacteria. This induced scientists to look for a nitrogen-containing

Card 1/3

Proteins From the Air

SOV/29-58-9-1/30

substance which produced ammonia on decomposition. One of these substances is the organic compound carbamide also called urea. The world production of this non-smelling, white, crystalline powder amounts to approximately 1 million tons (with the exclusion of the USSR). Modern chemical industry would be unthinkable without this valuable powder, as it has an exceptionally wide range of application. In the Vsesoyuznyy nauchno-issledovatel'skiy institut zhivotnovodstva (All-Union Scientific Research Institute for Cattle Breeding) tests were already made of using carbamide in sheep feeding. The test animals exhibited a much higher weight, more and better wool than those fed conventionally. Experiments with cattle also proved to be successful. It is known from information from abroad that proteins in the nutrition of ruminants can also be replaced by other chemical substances, by ammonium salts of mineral and organic acids. On the rear cover of this number the scheme of the production of "protein from the air" is given. There is 1 figure.

Card 2/3

GRADUSOV, Yu.M., aspirant

Urea as a part of sheep feed. Zhivotnovodstvo 20 no. 10:44-47
0 '58. (MIRA 11:10)

1. Vsesoyuznyy institut zhivotnovodstva.
(Sheep--Feeding and feeding stuffs)

PANKOV, V.A.; GRADUSOV, Yu.N., red.; SAYTANIDI, L.D., tekhn.red.

[Plague in fur-bearing animals] Chuma pushnykh zverei. Moskva,
Izd-vo M-va sel'.khoz.RSFSR, 1960. 43 p. (MIRA 13:9)
(Plague)

GRADUSOV, Yu.N.

VOLKOV, V.A.; FEDOROVSKIY, N.P., kand.biolog.nauk; PENIONZHKEVICH, E.E.,
prof., doktor biolog.nauk; MASLIYEV, I.T., kand.sel'skokhoz.nauk;
KRIKUN, A.A., kand.sel'skokhoz.nauk; PATRIK, I.A., kand.sel'skokhoz.
nauk; MALINOVSKAYA, A.S., kand.biolog.nauk; DAKHNOVSKIY, N.V.,
kand.biolog.nauk; ORLOV, M.V., kand.sel'skokhoz.nauk; REDIKH, V.K.,
kand.sel'skokhoz.nauk; GOFMAN, M.B., zootekhnik; GRIGOR'YEV, G.K.,
starshiy nauchnyy sotrudnik; GORIZONTOVA, Ye.A., starshiy nauchnyy
sotrudnik; FEOKTISTOV, P.I., kand.veter.nauk; KOTEL'NIKOV, G.A.,
kand.veterin.nauk; SEKUDOVA, R.I., red.; BALAKIN, V.M., red.;
~~GRADUSOV, Yu.N.~~, red.; SOKOLOVA, G.S., red.; SAYTANIDI, L.D.,
tekhn.red.

[Duck raising] Utkovodstvo. Izd-vo M-va sel'khoz. R.S.F.S.R.,
1959. 284 p. (MIRA 13:12)

1. Nachal'nik Glavnogo upravleniya ptitsevodstva Ministerstva
sel'skogo khozyaystva RSFSR (for Volkov). 2. Vsesoyuznyy nauchno-
issledovatel'skiy institut ptitsepromyshlennosti (for Grigor'yev).
3. Tsentral'nyy nauchno-issledovatel'skiy institut ptitseperera-
batyvayushchey promyshlennosti (for Gorizontova).

(Ducks)

GRADYUK, I. I.

"Experimental Investigation of the Work of Angular Reinforced Concrete Support Walls." Cand Tech Sci, L'vov Polytechnic Inst, L'vov, 1954. (RZhMekh, Apr 55)

SO: Sum. No. 704, 2 Nov 55 - Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (16).

SOV/124-57-9-11023

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 9, p 161 (USSR)

AUTHOR: Gradyuk, I. I.

TITLE: Experimental Investigation of the Functioning of Stem-and-base Type Retaining Walls of Reinforced Concrete (Eksperimental'noye issledovaniye raboty uglovykh zhelezobetonnykh podpornykh stenok)

PERIODICAL: Nauchn. zap. L'vovsk. politekhn. in-t, 1956, Nr 41, pp 35-50

ABSTRACT: The author provides some results of an investigation on the working of stem-and-base type retaining walls of reinforced concrete. Models of walls used were 1 meter high and 1.22 meters long, with a 3-4 cm thickness. The experiments were performed in a special box consisting of a steel frame and thick board bulkheads. Two plates of thick glass were substituted for the wooden bulkhead at one end of the box, an arrangement which permitted observation of the movement of the poured charge. The tests showed that slippage is not always the most dangerous form of displacement for the stability of the wall. The thesis of E. Mërsh [Zhelezobetonnyye sooruzheniya (Reinforced Concrete Structures), OGIZ, 1930] on the existence of a prism of failure during the sliding of the wall as well as the assertion of I. P. Prokof'yev [Davleniye

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SOV/124-57-9-11023

Experimental Investigation of the Functioning of Stem-and-base Type (cont.)

sypuchego tela i raschet podpornykh stenok (Pressure of Pourable Solids and Design Calculation of Retaining Walls), Stroyizdat, 1947] on the absence of slippage during the rotation of a vertical wall with respect to its bottom edge was confirmed. Present-day design of the bottom section of the vertical stem of a stem-and-base type retaining wall of reinforced concrete is calculated with respect to its bending moment which is determined in the same way as the overturning moment for the stability calculation of a wall. Experimental investigations showed that the value of the bending moment determined by such calculation is much too high.

I. K. Snitko

Card 2/2

PHASE I BOOK EXHIBITION 807/1301

L'vov, Politehnicheskii Institut

Material (Mechanics) L'vov, 1959. 69 p. (Series: Its: Dzhidzhi, tom 3, v. 1/2)
500 copies printed.

Material Board: A.I. Andriyevskii, Doctor of Technical Sciences, Professor; Ye.P. Barmine, Honored Scientist and Technical Worker, Doctor of Chemistry; Professor G.I. Kharadze, Corresponding Member, Academy of Sciences USSR and Academy of Sciences of Technical Sciences, Professor; M.S. Komarov (Resp. Ed.), Doctor of Technical Sciences, Professor; V.I. Kuznetsov, Doctor of Technical Sciences, Associate Professor; B.P. Levitskii (Deputy Resp. Ed.), Candidate of Technical Sciences, Associate Professor; V.A. Puzits'ev, Member, Academy of Sciences USSR; Doctor of Geology and Mineralogy, Professor; V.A. Tikhonov (Resp. Secretary), Candidate of Technical Sciences, Doctor; Tech. Ed.: T. Veselovskii.

PURPOSE: This booklet is intended for scientific workers and engineers.

CONTENTS: The booklet contains 12 articles on vibrations, impact stresses, cross-sections and sliding-crank mechanisms, fluid mechanics, and strength of reinforced-concrete beams. No particularities are mentioned. References follow several of the articles.

Author: A.I. and B.P. Levitskii, Analogy Between the Pressure Motion of a Homogeneous Liquid and Liquid Combining Gas in a Porous Medium 39

807/1301

Reprints

Reprints: A.I. Calculating Normal Sections of Stepped Beds of Mountain Streams 41

Reprints: A.I. Reservoirs for Protecting Bottom Lands from Flooding 45

Reprints: P.Ye. Taking Into Account the Action of a Transverse Force on the Carrying Capacity of the Cross Section of a Beam in Bending 55

Reprints: P.Ye. Investigating the Work of Reinforced-Concrete Cantilever Bending-Section Elements in the Vicinity of the Maximum Moment During Bending

Reprints: A.I. Carrying Capacity of Prestressed Reinforced-Concrete Elements in Bending 69

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9-3-59

KURYILO, Adam (Prof., Dr., Eng.), and GRADYUK, Ivan (Assistant, Cand. Tech. Sci.)
L'vov Polytechnical Inst.

"Versuche Mit Stahlbetonwinkelstützmauern,"
Bauplanung-Bautechnik, No. 12, 1957.

L 04642-67 EWT(m)/EWP(j) RM

ACC NR: AP6024410

SOURCE CODE: UR/0020/66/169/001/0077/0080

AUTHOR: Sevchenko, A. N. (Academician AN BSSR); Solov'yev, K. N.; Gradyushko, A. T.; Shkirman, S. F.

ORG: Institute of Physics, Academy of Sciences BSSR (Institut fiziki Akademii nauk BSSR)

TITLE: Quasiline electronic spectra of metal derivatives of tetrabenzoporphin and phthalocyanine

SOURCE: AN SSSR. Doklady, v. 169, no. 1, 1966, 77-80

TOPIC TAGS: electron spectrum, vibration spectrum, metallic organic derivative, phthalocyanine, spectral line, line intensity, molecular interaction

ABSTRACT: This research was motivated by the analogy between complex compounds of porphin derivatives with metals, on the one hand, and biological substances such as chlorophyll on the other. The authors succeeded in overcoming some of the earlier difficulties in the study of the fine structure of the electron-vibrational spectra of porphyrins, by creating conditions under which the quasiline spectra are sufficiently sharp to permit a vibrational analysis of the fluorescence absorption spectra. The procedure is similar to that used earlier for nonmetallic compounds (Izv. AN SSSR ser. fiz. v. 29, 1378, 1965 and earlier), n-octane being used as a host matrix for the investigated substance. The spectra were obtained with an ISP-51 spectrograph with a UF-84 camera. Detailed data on the spectra of tetrabenzoporphin, magnesium-

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tetrabenzoporphin, zinc-tetrabenzoporphin, magnesium-phthalocyanide, zinc-phthalocyanide, and phthalocyanine, together with the frequencies of the resolved lines and their relative intensities, are given. The comparison of the metal-derivative spectra with the spectra of the free bases leads to the conclusion that the general character of the vibrational structure does not noticeably change upon introduction of the metal, and that most frequencies can be compared for both types of compounds, tetrabenzoporphin and phthalocyanine, with the exception of the most active frequencies. The changes of the corresponding vibrations in the series free base - magnesium - zinc are analogous for both the tetrabenzoporphin and phthalocyanine, showing a similar influence of the metal atom on the dynamics of the molecule in both cases. The authors thank T. F. Kachura for preparing the investigated compounds. Orig. art. has: 2 figures and 2 tables.

SUB CODE: 20/ SUBM DATE: 24Feb66/ ORIG REF: 007/ OTH REF: 002

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Card 2/2

17(2,6)

SOV/177-58-1-14/25

AUTHORS: Penionzhko, A.M., Major-General of the Veterinary Corps, Gradyushko, G.M., Colonel of the Veterinary Corps

TITLE: Co-operation Between the Military Medical Corps and the Military Veterinary Corps (O kontakte mezhdru voyenno-meditssinskoy i voyenno-veterinarnoy sluzh-bami)

PERIODICAL: Voenno-meditssinskiy zhurnal, 1958, Nr 1, pp 57 - 61 (USSR)

ABSTRACT: The authors appeal to Medical Corps and Veterinary Corps officers to cooperate in order to prevent infectious diseases among soldiers. In one third of the cases, infectious diseases are communicated to the men by parasites from animals, in particular from farm animals. The best prophylaxis consists in improving the sanitary conditions of animals and in supplying soldiers with pure meat. In 1957, the functions of food control of the sanitary epidemic stations were transferred to meat control stations

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SOV/177-58-1-14/25

Co-operation Between the Military Medical Corps and the Military
Veterinary Corps

of the Ministerstvo sel'skogo khozyaystva (Ministry of Agriculture). The net of laboratories and veterinary staff of the military veterinary Corps is not large enough to cope with the situation without the help of the medical corps. In this connection, it is also hoped that there will be a better understanding of such little-known diseases as Q-fever, ornithoses, listerellosis, leptospirosis, influenza in pigs, and the better-known brucellosis, tuberculosis, rabies and anthrax through a closer cooperation of the two corps.

Card 2/2

GRADYUSHKO, G.M., polkovnik vet.sluzhby

Suggestions for improvement in veterinary laboratory practice. Voen.-
med.zhur. no.12:63-65 D '58. (MIRA 12:12)
(VETERINARY LABORATORIES)

GRADYUSHKO G.M.

ALICHKIN, S.L.; AGRINSKIY, N.I.; ANDREYEV, G.F.; BAKUMENKO, G.D.;
VORONTSOV, S.M.; VOYSTRIKOV, I.V.; GRADYUSHKO, G.M.; ZYKOV, A.V.
IVANOVTSSEV, P.V.; KINBURG, M.Ya.; KOVALEV, P.A.; KOZLOVSKIY, Ye.V.
KORNIYENKO, A.P.; KOLYAKOV, Ya.Ye.; LAKTIONOV, A.M.; LEVADNYI, B.A.
MEDVEDEV, I.D.; NOVIKOV, N.V.; ORLOV, F.M.; OSTROVSKIY, A.A.;
ORTSEV, V.P.; PENIONZHKO, A.M.; POLOZ, D.D.; PRITULIN, P.I.;
PETUKHOVSKIY, A.A.; ROGALEV, G.T.; RYBAK, P.Ya.; SUTYAGIN, G.P.
TUKOV, R.A.; KHAVCHENKO, D.F.; CHERNETSKIY, T.I.; SHPAYER, N.M.
SHUSTOVSKIY, F.A.

Nikolai Vasil'evich Spesivtsev. Veterinariia 35 no.2:96 F '58.

(MIRA 11:2)
(Spesivtsev, Nikolai Vasil'evich, 1901-1957)

GRADYUSHKO, G. M.

"A useful book."

Veterinariya, Vol. 37, No. 2, 1960, p. 79

GRADYUSHKO, N.A.

Cyclographic method for studying the walk of children with
paralytic pes calcaneus. Ortop., travm. i protez. 18 no.5:
27-30 S-0 '57. (MIRA 12:9)

1. Iz TSentral'nogo instituta travmatologii i ortopedii (dir. -
deystvitel'nyy chlen AMN SSSR prof.N.N.Priorov).
(FOOT--ABNORMALITIES AND DEFORMITIES)
(WALKING)

1. GRADZELIDZE, A. M.; ANANYASHVILI, G. D.

2. USSR (600)

4. Wood Waste

7. Obtaining methane gas for production needs from manure and other organic waste, Dost. sel'khoz., No. 1, 1953.

9. Monthly List of Russian Accessions, Library of Congress, April, 1953, Uncl.

ZAKRZEWSKI, Aleksander; DURSKA-ZAKRZEWSKA, Aleksandra; GRADZKI, Jan;
GETWEL, Tadeusz

Traumatic aneurysm of the intracranial internal carotid artery
with recurrent nasal hemorrhages. Otolaryng. Pol. 18 no.1:
47-51 '64.

1. Z Kliniki Otolaryngologicznej Akademii Medycznej w Poznaniu
(Kierownik: Kliniki: prof. dr A. Zakrzewski) i z Kliniki
Neurochirurgicznej Akademii Medycznej w Poznaniu (Kierownik
Klinik: doc. dr H. Powiertowski).

MAIAK, Michal; GRADZINSKI, Andrzej; SIBRAWSKI, Stanislaw

Colorimetric determination of copper in urine. Chem anal 5 no.5:
763-768 '60. (EEAI 10:9)

1. II Klinika Chirurgiczna Akademii Medycznej, Wroclaw. Kierownik
Kliniki: Prof. Dr. Wiktor Bross.

(Colorimetry) (Copper) (Urine)

MASIAK, Michal; GRADZINSKI, Andrzej; HITER, Aniela

Some biochemical changes and behavior of the acid-base equilibrium in preserved blood. Pol. arch. med. wewn. 33 no.6:645-648 '63.

1. Z II Kliniki Chirurgicznej Akademii Medycznej we Wroclawiu
Dyrektor: prof. dr med. W. Bross.
(BLOOD PRESERVATION) (ACID-BASE EQUILIBRIUM)
(HEMOLYSIS) (POTASSIUM)
(BLOOD CHEMICAL ANALYSIS)

MASIAK, Michal; PRZESTALSKI, S.; GRADZINSKI, A.

Measurement of the degree of hemolysis and of the phosphorus level in studies on the penetration of phosphate ions into the erythrocytes. Acta physiol. pol. 14 no.5:557-560 S-0'63.

1. Z II Kliniki Chirurgicznej AM we Wroclawiu; kierownik: prof.dr. W.Bross.

*

MASIAK, Michal; GRADZINSKI, Andrzej; SIERAWSKI, Stanislaw

Practical method for the rapid determination of the degree of
blood hemolysis. Pol. tyg. lek. 18 no.47:1764-1766 18 N'63.

1. Z II Kliniki Chirurgicznej AM w Wroclawiu; kierownik:prof.
dr. Wiktor Bross.

*

ACCESSION NR: AP4029530

P/0056/64/015/001/0085/0092

AUTHOR: Dorobisz, Tadeusz (Dorobish, T.) (Docent, Doctor); Przestalski, Stanislaw (Przestalski, S.) (Assistant Professor, Doctor); Masiak, Michal (Masyak, M.); Bielinski, Edward (Belin'ski, Ye.); Gradzinski, Andrzej (Gradzin'ski, A.)

TITLE: Effect of cobalt 60 gamma radiation on red blood cells from a human-blood bank

SOURCE: Acta physiologica polonica, v. 15, no. 1, 1964, 85-92

TOPIC TAGS: blood cell, red blood cell, blood bank, human blood, gamma radiation, cobalt, cobalt 60, phosphate ion, hemoglobin content, hematocrit index, osmotic resistance, hemolysis, plasma, potassium, irradiated blood, potassium level, sodium, sodium level, inorganic phosphorus

ABSTRACT: Human bank blood was submitted to doses of $2 \cdot 10^5$ r of gamma rays and was then stored for four weeks. Significant differences in the penetration of phosphate ions into the red blood cells of irradiated and control blood, in hemoglobin content, or in hematocrit indexes were not observed. In irradiated

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ACCESSION NR: AP4029530

blood a slight shift in pH toward the alkaline side and somewhat lower values of PCO_2 were found. After eight days minimal osmotic resistance of the red blood cells of irradiated blood showed complete breakdown, accompanied by marked hemolysis. The most interesting observation is that the levels of potassium in plasma of irradiated blood increased sevenfold 24 hours after irradiation, but further elevation did not occur. In control blood after eight days the potassium level were two times higher than initially, and after four weeks, four times. Sodium levels were lowered in the plasma of both groups of blood in parallel to the elevation of potassium levels. Inorganic phosphorus was increased in proportion to degree of hemolysis, especially in irradiated blood.

ASSOCIATION: Stacja Krwiodawstwa, Wrocław (Blood Donor Station); Katedra Fizyki WSR (Physics Department, Higher Agricultural School); II Klinika Chirurgicznej AM, Wrocław (Surgical Clinic of the Academy of Medicine)

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